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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/030,852

04/29/2002

Teruo Kawai

74457/20093

4159

23380

7590

02/27/2003

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EXAMINER

NGUYEN, TRAN N

ART UNIT

PAPER NUMBER

2834

DATE MAILED: 02/27/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/030,852

Applicant(s)

KAWAI, TERUO

Examiner

Tran N. Nguyen

Art Unit

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☐ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☐ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. ____.
 - 3) ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>1</u> . | 6) <input type="checkbox"/> Other: . |

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 5 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 5 recites, "every other end of the electromagnet is connected to the magnetic flux control member. It is not clear that this is an electrically connection or is it a mechanically connection. In light of spec., it is an electrically connection between every other end of the electromagnet to the magnetic flux control member.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3 and 5-8 are rejected under 35 U.S.C. 102(b) as being fully anticipated by Kawai (US 5436518).

Art Unit: 2834

Kawai discloses an electric motor comprising:

- an output member (14) that is disposed at one axial end of the shaft, wherein the output member comprised of magnetic plate provided with at least one radially protruding portion (14b) at outer periphery thereof;

- a magnetic flux control member (14) that is disposed at one axial end of the shaft and substantially parallel and spaced apart with the output member (figs 1-6);

- a plurality of electromagnets (16a-16g) disposed so that each electromagnet having one end of the electromagnet is in a spaced apart from the output member (14) that is disposed at one axial end of the shaft, and the other end of the electromagnet is in a spaced apart from the a magnetic flux control member (14) that is disposed at one axial end of the shaft

- a supporting member (10a) for supporting the electromagnets (16a-16g);

- a magnetizing mechanism (13) that comprised a permanent magnet disposed between the output member and the magnetic flux control member;

- a magnetizing current supply (17) for supplying current to the electromagnet.

The claimed language in claim 2 recites “*a rotor having a pair of movable members disposed in a substantially spaced apart relationship, each said movable member having at least one elevated portion on one side surface thereof in a substantially radial direction*”. This claimed language is also read in Kawai’s figs 1-6. Kawai shows a rotor having a pair of movable members (14) disposed in a substantially spaced apart relationship, each said movable member having at least one radially elevated portion (14b) that is formed by the recessed portion (14a) (fig 1).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2834

1. Claims 4 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawai, as applied in the rejections of the base claims, and further in view of level of ordinary skills of a worker in the art.

Kawai discloses the claimed invention, except for the added limitations that the magnetizing mechanism is an electromagnet.

Those skilled in the art would realize that the magnetizing mechanism can comprise either permanent magnet, as recited in claims 2 and 8, or an electromagnet, as recited in claims 4 and 9. The permanent magnet provide stabilized and reliable magnetization, however the magnet is not magnetically regulated in term of controllable and changeable magnetic characteristics such as magnetic magnitude, magnetic polarities and/or magnetic flux flow polarities as well as magnetic flux. While electromagnet is not as stable and reliable due to potential damage(s) to the coil winding thereof, but electromagnet is not magnetically regulated if one wishes to manipulate the magnetic characteristics such as magnetic magnitude, magnetic polarities and/or magnetic flux flow thereof.

Thus, it would have been obvious to one skilled in the art at the time the invention was made to modify the Kawai's motor by embodying the magnetizing mechanism as an electromagnet. Doing so would enable the manipulation and controlling of the magnetic characteristics thereof.

Communication

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tran N Nguyen whose telephone number is (703) 308-1639. The examiner can normally be reached on M-F 6:00AM-2:30PM.

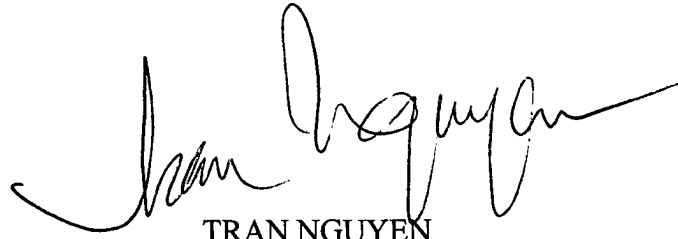
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on (703)-308-1371. The fax phone numbers for the organization where this application or proceeding is assigned are (703)305-3431 for regular communications and (703)-395-3432 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)-308-1782.

Application/Control Number: 10/030,852

Page 5

Art Unit: 2834

A handwritten signature in black ink, appearing to read 'Tran Nguyen', is written over the printed name.

TRAN NGUYEN

PRIMARY PATENT EXAMINER

TC-2800